

Founded in 1994, Cartell Chemical Co. Ltd. is one of the world's leading manufacturers of Cyanoacrylate Adhesives. Cartell Chemical has a strong research and development team, owns innovative production technologies with robust financial support and collaborates with world leading R&D teams to develop cutting-edge bonding solutions. By actively investing in research and development, constantly improving production facilities and inspection equipment, Cartell Chemical has been able to grow our market shares throughout the years.

Moreover, Cartell Chemical Co., Ltd. complies to ISO9001 and ISO14001 and our products are accredited with international standards including ISO10993-5, NSF, and REACH.

Cartell Chemical aims to provide expert advice and offer technical support to our customers from the product design phase to the most appropriate adhesive selection during the production phase. Our belief of continuous innovation and pursuing excellence makes it possible to gain recognition and credit from our customers in various industries and achieve successful sales worldwide.

Cartell Chemical dedicates itself in providing the highest quality, most cost competitive, and most reliable industrial solution in design, manufacturing and repair phase. Our products are widely implemented into industries such as electronics, medical devices, railway transportation, naval architecture, sports equipment, etc. Applications include toys, motors, hand tools, pneumatic tools, 3C electronic products, automotive accessories, etc.

#### Excellence

Cartell Chemical focuses solely on our realm of expertise. With dedication, continuous improvement and innovation, we serve our clients diligently and professionally.

#### Quality

Quality and Service are the beliefs of Cartell Chemical. Quality is our priority to ensure that satisfaction and contentment will be provided to our valued customers.

#### Environment

Cartell Chemical has been an advocate and supporter of environmental protection.

We have been working on the development of carbon reducing manufacturing processes and ensure we meet international environmental policies.

#### Win-Win

Cartell Chemical believes that the only path to true success is through the win-win relationships between customers, employees, suppliers, and all other social groups. Our goal is to provide the customer superior products with innovative technology to create a prosperous future.



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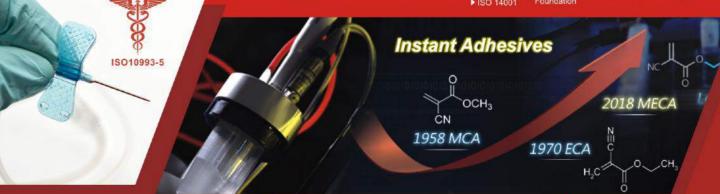












**MXBON**<sup>®</sup> Cyanoacrylate Adhesive products are specially developed for full ranges of comprehensive bonding applications.

Our mission is to create greater confidence for consumers offering higher adhesion strength, better durability and lower odor formulation, with less glue usage.



**MXBON 22401** 

#### No welding, No fastening and No riveting required

mxBon® Cyanoacrylate Adhesives meet all kinds of bonding requirements providing excellent adhesion strength and durability. mxBon® Cyanoacrylate Adhesives also enhance the cleanness and aesthetics of the product. Application ranges from electronic 3C products, handheld devices, speakers, electronic components, medical devices, hand tools, kitchen equipment, bicycles, sporting goods, daily consumer goods to automobile supply chains. mxBon® products can meet your various requirements in product designs and manufacturing requirements.

**MXBON**<sup>®</sup> Cyanoacrylate Adhesive is a single component, solvent-free adhesive product. It forms initial bonding within 5 to 10 seconds at room temperature and reaches 85% of full adhesion strength within 1 hour with shear strength up to 4,500 psi. With a single drop, **MXBON**<sup>®</sup> Cyanoacrylate Adhesive can bond materials such as: rubber, wood, metal,leather, ceramic materials, acidic or contaminated surfaces, and low surface energy plastic materials.

#### Reaching a higher level for your product design

When it comes to product design, **MXBON**<sup>®</sup> Cyanoacrylate Adhesive is the alternative to traditional methods. The unique characteristics of our adhesives enables engineers to boldly make designs using new composite materials. Whatever the material and design, **MXBON**<sup>®</sup> Cyanoacrylate Adhesive has the solution that best suits your needs.

#### **MXBON** \* provides bonding products and assembly solutions

**MXBON**<sup>®</sup> Cyanoacrylate Adhesives provide bonding solutions to a variety of assembly challenges, and most material substrates. **MXBON**<sup>®</sup> Cyanoacrylate Adhesive is a great tool to optimize product design, improve assembly efficiency, and lower production costs.



### Complete sealing-leaking prevention and humidity resistance.

**MXBON**<sup>®</sup> Cyanoacrylate Adhesive Gasket Sealing Fixture Solution provides stable and durable adhesion. Bonding pre-cut gaskets and O-rings onto complex substrates to prevent leakage is always a challenge.

**MXBON**<sup>®</sup> Cyanoacrylate Adhesives creates a tight-fitting sealing layer on complex metallic components and could replace foams or rubber gaskets in certain applications.



## Provide stable bonding for micro-components with strong adhesion in small area.

Bonding tiny, irregular-shaped components for structural points is a complicated task. **MXBON**<sup>®</sup> Cyanoacrylate Adhesive Micro-Components bonding solution provides a long lasting, stable, and vibration resistant bond. It makes bonding dissimilar components easy, as if the two components were like one piece.









LEATHER



**CERAMICS** 



PLASTIC

ASS LEAT

and various materials to reduce the weight of the product. Reducing product weight means cost reduction,

**Bonding composite materials** 

energy efficiency improvement and product esthetics enhancement. Product engineers always seek to utilize new and light-weight materials. However, bonding two parts of dissimilar material can be difficult to accomplish.

**MXBON**<sup>®</sup> Cyanoacrylate Adhesives offer high adhesion and strong durability with a variety of choices making bonding possible for composite material and other lightweight material such as plastic and metal.

## Optimize assembly process of medical products and electronic products.

ISO 10993 certified, Cyanoacrylate Adhesives **MXBON**® offers the optimal bonding solution for devices and equipment ranging from hospitals to clinics, long-term care, and home-based medical facilities.





**MXBON**<sup>®</sup> Cyanoacrylate Adhesive is designed to reduce assembling defects, increase production efficiency, and provide optimum bonding performances.

# General Purpose



Surface Insensitive: For materials that are difficult to bond

Difficult to bond materials are difficult to achieve good bonding performance without pretreatment or using suitable grades. It is strongly recommended to check the substrate to be bonded before bonding.

#### Two types of difficult to bond materials

- 1. Surface insensitive and low energy surface such as PTFE, POM, EPDM, Silicone, electroplated material, stainless steel and aluminum-magnesium alloy.
- 2. Porous materials, water absorption materials, acid surface materials such as leather, textile, wood and paper.

General purpose, medium viscosity, with stand 21401 General purpose, 121°C temperature up to 121°C

- •Transparent, fast setting •Excellent adhesion to most substrates
- ◆Especially for insensitive surface and low energy surface ◆Viscosity:80~120cps

| Penetration characteristics,low viscosity, 21406 Penetration characteristics, or withstand temperature up to 121°C

- •Transparent, fast setting •Excellent adhesion to most substrates
- •Especially for insensitive surface and low energy surface •Viscosity: 15~40 cps

21454

General purpose,gel type,withstand temperature up to 121°C

- Transparent, fast setting
- Suitable on vertical surfaces and gap filling up to 0.25mm
- Excellent adhesion to most substrates
- Especially for insensitive surface and porous materials
- •Viscosity: 15,000~20,000 cps

### Impact Resistance Rubber \_\_Toughened (black glue)



21380

General purpose, medium viscosity, black liquid, withstand temperature up to 107°C

- ·High temperature, high humidity resistant, high flexibility
- Excellent impact and peel/shear strength
- Excellent adhesion to plastic, rubber, metal
   Viscosity: 200~800 cps

Rubber toughened, flexibility, high viscosity, 21410 Rubber tougnened, mexibility, might stood 107°C black liquid, with stand temperature up to 107°C

- ·High temperature, high humidity resistant, high flexibility
- Excellent impact and peeling strength and resist most of chemicals
- •Excellent adhesion to plastic, rubber, metal •Viscosity: 1,700~5,000cps

21438 Rubber toughered, or 100°C withstand temperatures up to 100°C Rubber toughened, low viscosity, black liquid,

- Excellent impact and peeling strength and resist most of chemicals
- Excellent adhesion to plastic, rubber, metal.
- •Suitable for insensitive surface and porous materials •Viscosity: 100~300 cps

21480 Rubber toughened, low viscosity, black liquid

- •Black appearance, medium curing speed
- Excellent impact and peel/shear strength
- Excellent adhesion to plastic, rubber, metal ◆Viscosity: 100~200 cps

## Rubber Toughened (cleargiue)

21411 Transparent,impact resistance,high viscosity,gap filling

- ·High temperature, high humidity resistant, high flexibility
- Enhances resistance to shock/vibration condition Excellent impact and peeling strength and resist most of chemicals
- Excellent adhesion to plastic, rubber, metal
   Viscosity: 3,500~8,500cps

21435 Transparent,impact resistance,medium viscosity,withstand temperature up to 107°C

- •Excellent impact resistant and peeling strength and resists most of chemicals
- Excellent adhesion to plastic, rubber, metal.
- Special formulation for porous materials
   Viscosity: 100~250 cps

## General Purpose

21416 General, purpose, high viscosity, Transparent, gap filling

•Suitable for gap filling up to 0.2mm •Suitable for rough and irregular surface •Especially suited bonding plastic or rubber parts •Viscosity:900~1,500 cps

21420 | Penetration characteristics, low viscosity, Transparent, fast setting

- •Special formulation for the assembling variety of materials with low viscosity
- •Especially suited bonding plastic or rubber parts •Viscosity: 1~5 cps

General, purpose, low viscosity, Transparent, withstand temperature up to 121°C

- •Low viscosity, fast setting, high temperature resistant
- •Excellent adhesion to most substrates
- •Especially suited bonding plastic or rubber parts •Viscosity: 20~60 cps

## Specialty Purpose\_

21382 | PCB cable tacking, high viscosity, transparent, high bonding strength

- •Suitable for gap filling up to 0.2mm •Withstand temperature up to 100°C
- •Excellent adhesion to most substrates
- •Suitable for accelerator of MXBON 2001G/L •Viscosity: 3,500~8,500 cps

21498 | Heat resistances, medium viscosity, transparent

•Thermal cycling resistance •Excellent adhesion to plastic, rubber, metal Viscosity:400~600cps



### Metal Series

23415 General purposes, medium viscosity, transparent, gap filling

•Suitable for gap filling up to 0.2mm •Suitable for rough and irregular surface •Excellent adhesion to plastic, rubber, metal •Viscosity: 900~1,500cps

Penetration characteristics, low viscosity, Transparent, high bonding strength

- •Special formulation for the assembling of a variety of materials with low viscosity
- Excellent adhesion to most substrates, particularly suitable to metals
- •Viscosity: 1~5cps

General purposes, low viscosity, Transparent, high bonding strength

- •Excellent adhesion to most substrates, particularly suited to metals
- •Suitable for bonding rubber to plastic •Viscosity: 100-200cps

# (MECA TYPE) Low Odor/ Low Blooming



## The optimal experience of benefits and advantages using MXBOn®

- •Easy to dispense •Weight reducing on components
- Costs saving production
   Work time saving
   Easier process for surface cleaning
- Fast setting on components Cures quickly to variety of materials
- Excellent adhesion to most substrates, especially plastic and rubber.

## **Odifficult bondingmaterial**

22401 General purpose, low viscosity, transparent, withstand temperature up to 100°C



- Transparent, fast setting
- Excellent adhesion to most substrates
- •Especially suited for insensitive surface and low energy surface
- ·Low odor low blooming
- •ISO 10993-5 certified •Viscosity: 80~100cps

22403 Transparent, colorless, high bonding strength



- Transparent, colorless, fast setting
- •Withstand temperature up to 100°C
- Excellent adhesion to plastic, rubber, metal. Especially suited for insensitive surface and porous materials
- ·Low odor low blooming
- •ISO 10993-5 certified •Viscosity: 900~1,300cps

Penetration characteristics, low viscosity, low odor low blooming



- Transparent, fast setting
- Excellent bonding strength
- •Especially suited for insensitive surface and low energy surface
- •Cures quickly to a wide variety of materials
- Viscosity:4~10cps

Penetration characteristics, low viscosity, Transparent, with stand temperature up to 100°C



- ·Transparent, fast setting
- •Excellent adhesion to most substrates
- •Especially suited for insensitive surface and low energy surface
- ·Low odor low blooming
- •ISO 10993-5 certified
- •Viscosity: 22~55cps

# -Surface Insensitive-for Specialty Purpose (Low Odor, Low Blooming)

22435

Rubber toughened, low odor low blooming, withstand temperature up to 100°C

- •Transparent, colorless, fast fixture speed ·High flexibility, high bonding strength, excellent shock resistance against humid environment.
- ·Cures quickly to a wide variety of materials
- Suitable for gap filling up to 0.15mm
- Suitable for porous materials
   Viscosity: 250~500cps

22455 General purpose, gel type, low odor low blooming

- Transparent, high bonding strength
- •Suitable for gap filling up to 0.25mm Suitable for vertical surfaces
- Excellent adhesion to most substrates •Viscosity: 10,000~30,000cps

22498 Thermal cycling resistance, low odor low blooming



- Transparent, excellent humidity resistance Maintaining the performance and adhesion strength under temperature of 100°C 

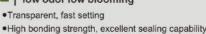
  •Viscosity: 400~600cps

Withstand temperature up to 150°C, low odor low blooming



- Transparent, excellent humidity resistance ·Maintaining the performance and adhesion
- strength in temperature 100°C or above •Viscosity: 200~400cps

224902 Highly flexible, low viscosity, low odor low blooming



 Designed to assemble flexible medical devices •ISO 10993-5 certified •Viscosity: 30~70cps

## UV Curable Cyanoacrylate Adhesive (Low Odor Low Blooming)

22441 Low Viscosity, light cure cyanoacrylate

- Transparent, slight green color, rapid fixture •Cure with UV light and/or moisture
- •Gap filling capacity •Viscosity: 8~20cps

22443 Medium Viscosity, light cure cyanoacrylate

- •Transparent, slight green color, rapid fixture Cure with UV light and/or moisture!
- •Easy to dispense •ISO 10993-5 certified •Viscosity: 150~300cps

22446 High Viscosity, light cure cyanoacrylate

- •Cure with UV light and/or moisture

•Transparent, slight green color, rapid fixture

22449 General purpose,gel type without runs or drips, low odor low blooming

- •Transparent, slight green color, rapid fixture
- •Cure with UV light and/or moisture •Viscosity: 15.000~25.000cps







# Technical Information (21406) (21438 (23415) (23496) (



Directives					To			la iti	10-4	T'			Suitable Bonding Substrates																	
Product Number	Color	Viscosity (cPs)	Strength (psi)	Temperature Range(°C)	Tg (°C)	Shore D	Carbon steel	Aluminum alloy	ABS	ng Time PC	(/sec) NBR	Carbon steel	Aluminum	Plating	Plastic	Rubber	Elastomer	Ceramics						Low Odor	Impact Resistance	Anti-aging	Temp Resistance	Vertical plane	Light Curing	Certificate
V	_			V	V	V		V	V	V	V		V		V	V	V	V	V	V	V	V	V	V		V	V	- V-	V	
21380	Black	200~800	3,800	-40~ 107	120	76	< 100	< 55	< 35	< 85	< 20	0	0	0	•	0	•	0	0	0	0	0			•	0	0			
21382	Transparent	3,500~8,500	4,300	-54~ 100	150	85	< 20	< 25	< 30	< 20	< 10	•	0	•	•	•	•	0	0	•	•	•			0		0	0		
21401	Transparent	80~150	4,000	-54~ 121	150	85	< 10	< 10	< 5	< 5	< 10	•	0	0	•	•	•	•	•	0	•	•	•				0			
21406	Transparent	15~40	3,800	-54~ 121	150	83	< 10	< 10	< 5	< 15	< 15	0	0	0	•	•	•	•	•	0	0	0	•				0			
21410	Black	1,700~5,000	3,200	-54~ 107	150	80	< 100	< 40	< 40	< 80	< 30	0	0	0	•	0	•	0	0	•	•	•			•	0	0			
21411	Transparent	3,500~8,500	4,300	-54~ 99	150	85	< 20	< 25	< 30	< 20	< 10	•	0	•	•	•	•	0	0	•	•	•			0		0	0		
23415	Transparent	900~1,500	4,200	-54~ 82	165	81	< 50	< 60	< 40	< 60	< 40	•	•	•	•	0	0	0	0	•	•	•			0					
21416	Transparent	900~1,500	3,600	-54~ 82	150	84	< 25	< 30	< 40	< 20	< 10	0	0	•	•	•	0	0	•	•	•	•								
21420	Transparent	1~5	3,700	-54~ 82	150	84	< 25	< 20	< 20	< 30	< 10	0	0	0	•	•	•	0	•	0	0	0								
21435	Transparent	100~250	3,700	-54~ 107	150	80	< 55	< 50	< 25	< 55	< 30	0	0	0	•	•	•	0	0	0	0	0			•	0	0			
21438	Black	100~300	3,300	-40~ 100	150	81	< 60	< 50	< 25	< 80	< 20	0	0	0	•	0	0	0	0	0	0	0			•	0	0			
21454	Transparent	Gel	3,600	-54~ 121	150	84	< 5	< 20	< 5	< 15	< 5	0	0	0	•	0	0	•	0	•	•	•	•				0	•		
21480	Black	100~200	3,400	-54~ 82	150	80	< 30	< 30	< 20	< 20	< 10	0	0	0	•	•	•	0	0	0	0	0			•					
23493	Transparent	1~5	4,500	-54~ 82	165	80	< 45	< 55	< 30	< 65	< 30	•	•	•	•	0	0	0	0	0	0	0								
21495	Transparent	20~60	3,800	-54~ 121	150	83	< 10	< 10	< 5	< 15	< 15	0	0	0	•	•	•	0	0	0	0	0					0			
23496	Transparent	100~200	3,700	-54~ 82	165	84	< 20	< 50	< 30	< 30	< 25	0	•	•	•	0	0	0	0	0	0	0								
21498	Transparent	400~600	3,700	-54~ 82	150	84	< 25	< 20	< 15	< 20	< 10	0	0	•	•	•	0	•	•	0	0	0				0				
22401	Transparent	80~120	3,500	-54~ 100	150	82	< 5	< 5	< 5	< 10	< 15	0	0	0	•	•	•	•	•	0	0	0	•	•			0			ISO 10993
22403	Transparent	900~1,500	3,600	-54~ 100	150	83	< 10	< 20	< 5	< 15	< 20	0	0	0	•	•	•	•	•	•	•	•	•	•			0			ISO 10993
22408	Transparent	4~10	3,100	-54~ 100	120	75	< 15	< 5	< 5	< 10	< 15	0	0	0	•	•	•	•	•	0	0	0	•	•	0		0			
22435	Transparent	250~500	3,600	-54~ 100	150	75	< 5	< 5	< 5	< 15	< 15	0	0	0	•	•	•	•	0	0	0	0	•	•	•		0			
22455	Transparent	Gel	3,100	-54~ 100	130	79	< 75	< 30	< 40	< 50	< 30	0	0	0	•	•	0	•	0	•	•	•	•	•	0		0	•		
22460	Transparent	25~55	3,200	-54~ 100	120	78	< 20	< 20	< 5	< 20	< 15	0	0	0	•	•	•	•	•	0	0	0	•	•	0		0			ISO 10993
22498	Transparent	400~600	3,100	-54~ 100	120	80	< 20	< 20	< 5	< 15	< 20	0	0	0	•	•	0	•	•	0	0	0	•	•	0	0	0			
22698	Transparent	200~400	2,900	-54~ 150	120	80	< 20	< 20	< 20	< 30	< 20	0	0	0	•	•	•	•	0	0	0	©	•	•	0	•	•			
224902	Transparent	30-70	3,500	-54~ 100	150	55	< 5	< 5	< 5	< 15	< 15	0	0	0	•	•	•	•	0	0	0	0	•	•	•		0			ISO 10993
22441	Transparent	8~20	3,100	-54~ 100	120	75	<15	<15	<15	<15	<5	0	0	0	•	•	•	•	0	0	0	0	•	•			0		•	
22443	Transparent	150~300	3,500	-54~ 100	150	82	<15	<15	<15	<40	<10	0	0	0	•	•	•	•	0	0	0	0	•	•			0		•	ISO 10993
22446	Transparent	600~1,200	3,600	-54~ 100	150	83	<20	<20	<15	<40	<10	0	0	0	•	•	•	•	0	0	0	0	•	•			0		•	
22449	Transparent	15,000~25,000	3,100	-54~ 100	130	79	<20	<20	<15	<40	<10	0	0	0	•	•	0	•	0	•	0	0	•	•			0	•	•	